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ABSTRACT

Three speeches and 10 symposium reports are contained in this conference summary. The speeches are entitled: a) "How to Improve Instruction on the Basis of Evaluation"; b) "Evaluation of Instructors: The State of the Art and the Art of the State"; and c) "Apple Pie, Motherhood, and Evaluation." The topics of the 10 symposia are: a) Divergent Perceptions of Instructional Improvement Strategies; b) Implications of the New California Testing Program; c) Community Involvement in Evaluation and Instruction: A Reasonable Role; d) Renovating Ineffectual Evaluation Programs; e) Evaluating and Improving the Quality of Instruction in Higher Education; f) Employing Criterion-Referenced Measures for Instructional Improvement; g) The Evaluation of Administrative Personnel; h) Early Childhood: Fabric, Fantasy, and Fact; i) Staff Development Programs That Make a Difference; and j) Pitfalls and Pratfalls in Stull Act Implementation. A 13-page bibliography is included. (HMD)

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PROCEEDINGS OF THE 25th ANNUAL STATE CONFERENCE ON EDUCATIONAL RESEARCH

"BETTER INSTRUCTION THROUGH BETTER EVALUATION"

INTERNATIONAL HOTEL

LOS ANGELES

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NOVEMBER 29-30, 1973

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INTRODUCTION

CONFERENCE PROCEEDINGS HAVE BEEN AN ANNUAL FEATURE SINCE 1958. PRIOR TO THAT DATE, AN ANNUAL REPORT WAS GIVEN ABOUT THE CONFERENCE AFTER ITS CONCLUSION.

EACH PARTICIPANT THIS YEAR SUBMITTED HIS REMARKS ON SPECIALLY DESIGNED PAPER. EACH PAGE WAS PHOTOGRAPHED IN ORDER TO PREPARE A PLATE SO THAT THE PROCEEDINGS COULD BE PRINTED AS SUBMITTED BY THE AUTHORS, WITHOUT EDITING BY THE CTA STAFF.

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FIRST GENERAL SESSION

SPEAKER: RALPH W. TYLER, DIRECTOR EMERITUS
CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES
SCIENCE RESEARCH ASSOCIATES

TOPIC: "HOW TO IMPROVE INSTRUCTION ON THE BASIS OF EVALUATION"

HOW TO IMPROVE INSTRUCTION ON THE BASIS OF EVALUATION?

Ralph W. Tyler

(Ralph W. Tyler is Director Emeritus Center for Advanced Study in tne Behavioral Sciences. He received his A.B. degree from Doane College, and M.A. from the University of Nebraska, and P.h.D. from the University of Chicago.)

The role of evaluation in improving instruction varies with the instructional practices of the schools as well as with the evaluation instruments that are available. In the past, and even today in many schools, the material of a topic or unit was presented to all the pupils in the class at the same time and they were also given the same assignments or learning tasks to be completed during the time allotted to the topic. It was expected that some pupils would learn more and some less, and as the year went by the "slow learners" would be increasingly separated from the average pupils because of the increasing differences in the amount they were learning. Their educational achievements were appraised from time to time on the basis of their class performance and the tests made by the teachers to cover the contents of the topic or unit. Published tests which were norm-referenced were commonly administered not more than once a year to provide the school administration with data regarding the relative standing of the school in relation to other schools and to furnish teachers with information about the relative achievement of pupils in each class that could be compared with the results obtained from the tests and assignments given by the teachers. Consciously or unconsciously, the school operated very much like an institution for sorting children as well as an educational one. Inadequacies in learning in such a system were thought to be largely due to the limited intelligence of the pupils or their lack of effort rather than to the inappropriateness and ineffectiveness for some children of the

learning experiences employed. The so called "intelligence tests" or "scholastic aptitude tests" were used to identify pupils with different levels of intelligence and their "IQ scores" were compared with their achievement scores to identify "underachievers", that is, those whose ranking on intelligence tests were higher than their ranking on achievement tests.

In a system operating on these assumptions and following these procedures, certain decisions could be made about instruction partly based on test results. If the school's mean score on the achievement test was at or above the accepted norm, the instruction was deemed satisfactory. If it was considerably above the norm the instruction was considered superior. In either case, if there were a number of "underachieving pupils", instruction for them should be improved by increasing their motivation, by furnishing additional assignments, by setting up some remedial sessions, or by assigning them to a different track.

If the school's mean score was below the norm, the intelligence test results were examined to find out whether the lower performance on achievement tests could be explained by the lower intelligence. If the school's mean score on the intelligence test was as much below the norm as the achievement mean, the instruction was deemed satisfactory. If the intelligence test mean was much farther below the mean than the achievement test mean the instruction was considered superior. In these cases, too, if there were a considerable number of "underachievers" the same efforts were recommended to help them "achieve up to their capacity". If the school's mean score on the intelligence test was higher than the mean score on the achievement test, it was assumed that the lower achievement was not due to lack of ability on the part of the average students. In such cases teachers and principals explored other possible explanations such as inadequate learning in the earlier grades, lack of effort, poor motivation, too little time allowed in the schedule for these subjects, inappropriate instructional materials, and inappropriate teaching methods. Steps that were commonly taken to deal with these problems were to suggest that teachers in the earlier grades give more emphasis to basic skills, to urge pupils to work harder, to try various devices to increase interest in these subjects, to schedule more time for them to establish remedial sessions or courses, to place students in a lower "track", to select different text books and work books, seeking particularly to find materials with lower levels of vocabulary, and to try another teaching methodology.

The major concern in these procedures was to help students do better whose rank on achievement tests was lower than their rank on intelligence or scholastic aptitude tests. Very little attention was given to those whose achievement rank was higher. Perhaps this was partly due to the difficulty of

rationalizing an "over achiever" concept. How could a student do better than he was able to do? Perhaps it was partly due to the fact that little outside pressure was placed on the teacher to help "fast learners" to achieve more.

It is clear that norm-referenced tests have been useful in instructional systems designed to sort students and to push out or place in lower tracks students whose achievement ranks are lower. It is also true that most teachers used other devices as part of their procedure for aiding individual students with their learning difficulties. The students performance in class, his handling of assignments, his workbook efforts, the marks he made on tests given by the teacher were common indicators to the teacher of the student's learning problems. But without an accepted doctrine that all or almost all students could be expected to master what was presented the teacher had no approved procedure for analyzing the inadequacies of the student's performance. Generally, the student was told that he did not perform successfully on a particular learning task and was directed to try again. If the second or third trial was still unsuccessful, the busy teacher usually gave up his attempt to give individual help to the student. Fortunately, in some cases where the student's specific unsatisfactory performance was identified and he was asked to try again, the second or third effort was successful so that not all students were sorted and assigned sections or tracks solely on the basis of norm referenced tests.

The major point, however, should be clear, namley that an educational system that views sorting as a major function will find norm-referenced tests helpful. But schools are no longer accepted as adequate if they operate primarily to sort students. Currently schools are expected to educate all their pupils; yet most are bound to a system in which all learners are expected to move at the same rate and those performing less satisfactorily than others are discouraged and give up or get farther and farther behind so that they lack the earlier achievement required to perform the later learning tasks.

We know enough about the way in which complex behavior is learned to realize that the learner is aided by starting with behavior he can readily acquire, and after he masters the first step he moves on step by step. He masters each new step if it is largely based on the preceding one. Complex behavior is acquired through a sequence of steps. An adept learner works out his own sequence but many children need help, and for them it is necessary to devise an effective learning sequence.

With the current expectation that the school will educate all children the instructional practices and the supporting doctrine are changing from those that operate in a sorting system. The delay in developing a new system has been due to the fact that the old system has worked quite well with

a majority of children so that it has not been questioned but rather we have talked about "slow learners" or "dull students", now we are recognizing the need to reconstruct the learning system if we are to reach effectively the children who have not been learning previously. In the new systems, behavioral objectives arranged in sequence, are being formulated and learning experiences selected or devised to enable students to attain these objectives in step-by-step progression. Such a system can be used in group instruction as well as in individual tutoring.

A Teacher who tries to manage a learning system where every child is engaged in activities that he can perform finds three evaluation instruments of great help. Since such a system requires the arrangement of learning experiences in sequence for each of the major objectives, and since children differ in the extent of their previous learning, for each student, a decision must be made regarding a place in the sequence where he can begin. This decision is aided by a placement procedure or test that indicates what the student has already learned and what next step in the sequence he can expect to carry on successfully. After he has engaged in the learning activities designed for the step where he begins, a mastery test can furnish evidence that he has acquired the desired behavior and is ready to proceed with the next step in the sequence. If the mastery test indicates that he has not acquired the behavior that this step in the sequence is designed to help him learn, a diagnostic test for this step can be used which enables the pupil and teacher to identify the particular difficulty the student is having and furnishes a basis for another series of learning experiences that provide more gradual development and further practice of the behavior that the student did not master during his first experiences with this step in the sequence.

Current widely used achievement tests do not provide dependable information either for placement or for mastery purposes, and thus far, few diagnostic tests have been developed for the several steps in the sequences of the major school subjects. The survey types of achievement tests have been designed to measure individual differences among students, not to indicate where each one is on a learning sequence, or whether he has gained mastery of the step on which he has been working, and, of course, survey tests do not furnish a diagnosis of the specific learning difficulty the student is encountering. The items used in achievement tests in a given subject are designed to sample the knowledge and skills commonly emphasized in the subject over several school grades. On the basis of try outs, items are selected which are answered correctly by a greater percentage of children in each higher grade; for example, a greater percent of fifth grade children than fourth grade children. Items are rejected that are answered correctly by most of the pupils or by few of them, since they do not discriminate among the pupils, and thus do not serve to arrange them in order

from those who get high scores to those who receive low ones. The result of this selection procedure is a test which does not reliably sample each objective and each step in a sequence.

A placement procedure useful for a teacher and the students in a learning system designed to help every child progress involves a two-step appraisal. The first is a test constructed to sample each major section of the learning sequence. A primary reading program, for example, may have a sequence in which the first several steps involve the use of simple oral communication, the second several steps are concerned with the alphabet, and the third, with the decoding of common phonemes. The first placement test would be constructed to sample reliably each of the three series of steps but would not furnish a reliable sample of the behavior in each step. It would provide, thereby, an indication of the major divisions in the sequence already learned and in what division the beginning step would be found. This enables the pupil to check himself on mastery tests within this division to identify the next step that he has not yet mastered.

When the pupil has carried through successfully the learning experiences which have been designed to enable him to acquire the behavior involved in this step, a mastery test furnishes new situations in which he can demonstrate his command of this behavior. A mastery test, hence, is quite different from current achievement tests. In the first place, it is based on the behavior to be learned in a sequential step in the learning system. There are as many mastery tests needed as there are steps in the sequence employed. The complexity and/or difficulty of the behavior sampled by a mastery test is determined by the complexity and/or difficulty of this behavior as it is to be used by the student as soon as he has mastered the step. For most school programs, the behavior learned in step 1 will then be used in step 2, and the behavior in step 2 will be used in step 3, and so on. This means that the requirement is for the student to be able to use in the next step the behavior he is learning in this step. This becomes the so-called "criterion referenced norm." At the points in the sequence where the behavior is primarily to be used outside the schoolroom or in other school subjects, the complexity and/or difficulty level commonly required become the "criterion referenced norms." This is another way of saying that a pupil has mastered the behavior when he is able to employ it successfully in the next stage of his life.

Note that mastery tests are not designed to spread out a distribution of pupils. Much of the effort of the teacher and the pupils is to learn something and be able to use it, not primarily to say that one is at the 90th, 60th, 40th or some other percentile in the distribution of pupils' scores on an achievement test. When the student's performance on the mastery test shows that he has acquired the behavior which the step was designed to help him learn, he moves on to the next step in the sequence. If his performance on the mastery test is

not satisfactory, a diagnostic test can be taken which enables him to identify the particular aspects of the behavior that he finds difficult. A diagnostic test is based on an analysis of the kinds of errors and difficulties found with some students. The test samples these more specific aspects of behavior to help identify the particular difficulty a student is having. If a diagnosis is to be helpful to the student, he must also have available learning exercises that are designed to furnish more learning experiences for the particular aspects of behavior that he finds difficult and these learning experiences should involve somewhat different approaches to the skill, the concept or the value from those employed in the lessons he worked on before.

It is possible to summarize this discussion of improving instruction on the basis of evaluation by noting that where the instructional practices emphasize sorting and assume that the purpose of the school is to bring the relative performance of pupils in their school work in harmony with estimates of their scholastic aptitude or intelligence, norm-referenced achievement tests are useful in identifying "under achievers and indicating the persons who can be assigned to remedial courses or lower tracks, or given more time or more learning exercises to improve their scores. Where the purpose of the school is to help each student to learn what the school seeks to teach, the instructional practices must provide for sequential learning and evaluation procedures for placement, mastery and diagnosis are important aids in improving instruction. To develop the full potential of such a learning system requires a curriculum designed for sequential learning, appropriate evaluation instruments, and the development of classroom practices that enable teachers to manage such a system. Practices that help in this management process are pupil self-administered tests and learning exercises, peer-group teaching and learning; cross-age teaching and learning; the use of teacher aides for diagnosis and assignment of learning exercises. A number of schools are now pioneering in the development of improved and effective instructional procedures to help all children to learn.

SECOND GENERAL SESSION

SPEAKER: ASSEMBLYMAN JOHN VASCONCELLOS

24th DISTRICT

TOPIC: "SELF ESTEEM, LIBERATION AND LEARNING"

THIRD GENERAL SESSION

SPEAKER: MICHAEL SCRIVEN

PROFESSOR

DEPARTMENT OF PHILOSOPHY

TOPIC: "EVALUATION OF INSTRUCTORS: THE STATE OF THE ART AND THE ART OF THE STATE"

THE EVALUATION OF INSTRUCTORS--
THE STATE OF THE ART AND THE ART OF THE STATE

Michael Scriven

(Michael Scriven is a Professor of Philosophy at the University of California, Berkeley, is Chairman of the Senate Committee on Teaching there, Chairman and designer of the Master Panel system used by NIE to evaluate all its R&D projects, and author of an absurd amount of writing about evaluation.)

The state of the art is pitiful, a fact which lays instructors open to artful exploitation by the state in the form of regulations using, e.g., contact-hours as the sole measure of merit.

There are two very different problems involved in the evaluation of K-12 teachers (or State College faculty) in California on the one hand, and University of California faculty on the other. The former can only be evaluated for competence/incompetence or Pass/Not Pass, since raises and promotions are guaranteed: the only decision to be made is to fine or not to fine. The latter are supposedly also promoted/rewarded in a way that is connected with their teaching performance (as well as with their research, etc.). However, in the former systems initial appointments and tenure decisions may involve consideration of "merit beyond the minimum".

It's much easier and/or more reliable to identify incompetence than superior performance, at the moment. In fact, we can do quite a good job at it. The paper presents some detailed examples of items and the relevant judges to support these claims, and then goes on to consider what can be done with regard to estimating the quality of post-minimum, i.e., meritorious performance, both now and in the future. The general conclusion is that we can now implement--although no one has yet done so--a systematic procedure that will give us considerable objectivity and worthwhile reliability; that we can quickly move towards a position where we have very good reliability; and that failing to do either of these things will simply lead to further and well-deserved attempts at exploitation.

FOURTH GENERAL SESSION

SPEAKER: CLARENCE L. HALL

ASSOCIATE SUPERINTENDENT OF PUBLIC INSTRUCTION

EDUCATION PROGRAM MATRIX

TOPIC: "APPLE PIE, MOTHERHOOD AND EVALUATION"

APPLE PIE, MOTHERHOOD AND EVALUATION

Clarence L. Hall

Clarence L. Hall is Adjunct Professor of Education at Claremont Graduate School, Claremont, California. He received both his B.A. and M.A. degrees from the University of Pacific and Ed.D. in Education Administration from Stanford University.

Ten years ago I was absolutely convinced that the financial resources of this state and nation could support any level of educational endeavor. I was certain the dollars were available to fund our most grandiose strategies. I reasoned the problem was simply a matter of conflicting demands, domestic and foreign, with the investment in education always ending up as too low a priority.

I continue to believe our societal priorities could stand some scrutiny, but now realize what was always true, that our resources are finite. This nation cannot afford a truly professional salary for a teacher for every twenty-five learners. We cannot afford the array of all of the support personnel considered necessary in each of those classrooms. We cannot make available all educational technology, materials and equipment that's ours for the buying; nor can we house all learners in physical facilities that represent the best of contemporary functional design. We have to make some choices and set priorities.

Even if the financial resources of the United States were unlimited, the Congress, the President, the California Legislature, the Governor and local communities all now add their increasing demands beyond the traditional impassioned pleas for more funds for

schools. Yes, we do have to make some choices and the various decision makers at all levels want to, and will, participate. Rightfully, they expect our reasoned arguments to be supported by evidence.

We are indeed in the era of accountability in education and you who are evaluation experts are the new elite. Leon Lessinger, who has spoken and written more than anyone else about this movement, introduced the concepts of accountability and educational audit to the U.S. Office of Education. Prior to his acceptance of the position of Deputy Commissioner in Washington, D.C., as most of you know, Leon was a district superintendent in California. We were both members of a small consortium of superintendents who met regularly to exchange management and program ideas. I can recall discussing--no debating--the need for what he then called "quality control" in our schools. The issue is no longer debatable.

Application of the "quid pro quo" principle to the requests of educational institutions is standard in the 70's. Federal, state and local policymakers expect no less than a statement of quantitative and qualitative results in understandable, meaningful terms. You, "the new elite," bear a heavy burden in satisfying that expectation.

Virtually every educational legislative proposal, state or federal, contains an evaluation component. The last session of the California State Legislature, for example enacted SB 1302, the early childhood education bill, AB 2284, the bilingual programs bill, AB 1258 the early childhood education program for American Indian children, and SB 90 providing $82,000,000 for educationally disadvantaged youth. Each of these programs requires evaluation of outcomes. Both the clarity and content of those evaluations will determine the maintenance, expansion or the discontinuance of funding for these new programs.

Additionally, a host of existing programs are being questioned, scrutinized, analyzed and jeopardized by the probing of the Governor and his staff, the legislators and their administrative aides, and the Legislative Analyst and his staff. They want evidence--and they are quite willing to invest funds to get the answers. At the same time that program proposals are being legitimately questioned, evaluation dollars are very easy, almost illegitimately easy, to come by. Evaluation has become an "American flag, motherhood, apple pie issue" in the minds of local policy makers, of the legislators and the Governor.

Now I'm not an evaluation specialist, but a general practioner who has grown leery of apple pie issues. The easy math-

science money of the late 50's and early 60's available for programs--good, bad and worse--helped make me cautious. The easy language lab money, used poorly almost universally, helped make me cautious. We all recall how NDEA funds were there for the asking to install language labs that were on nobody's needs list, were neither understood, nor used properly and have since been dismantled. But the lab was in vogue. It was the thing to do, even if done badly.

I feel a sense of responsibility to sound a warning about the "apple piedness" of evaluation--to warn of the tendency to overact, to abuse, to overemphasize when issues are given noncritical sanction. Extremism flourishes on nonquestioning sanction. I simply want us to be certain we measure the right things with the right procedures in the proper context.

By "proper context" I mean that the evaluation component should be an integral part of the comprehensive plan whether that plan applies to administrative decisions, instructional program decisions, or decisions about individual learners. That plan should include an assessment and prioritization of identified needs, the establishment of program objectives, generation of a range of activities, selection of the best from among the alternative courses of action, and development of a system for monitoring and reviewing the implementation of the plan. Good planning makes the design of good evaluation easier. Unfortunately, the demands and requirements for evaluation have too often come after the fact by imposition or afterthought.

Secondly, I see a danger in reaching conclusions about programs based on oversimplified evaluation data. I have observed the evaluation of total school systems on the basis of the quality of the performing groups from the music department, the record of the football team and the reading scores. Dependence on measures of process and product outcomes for better educational decisions demands respectable measurement of the right variables.

Albert Einstein defined education as "that which remains after you've forgotten everything that you learned in school." Einstein possessed a talent for simplification of the complex into meaningful yet profound terms. He meant that education is not mastery of a body of content or sterile facts, but rather it is the acquisition of a thirst, an inquisitiveness, it's an attitudinal set, it's a style. It is the lasting influence the great teachers in our lives have had on us. Two exceptional teachers who touched my life were Miss Houlihan, a fourth grade teacher in Idaho and Dr. Ingego, a professor at University of

the Pacific. I can't tell you much, if any, of the content of what they taught, but I could describe in detail the continuing influence they both had on me as a learner and human being. That influence is one of the very important things that remained after I forgot what I was taught in school--even important enough to assess, to measure, to evaluate.

The uncertain tomorrows facing today's learners call for creativity, boldness, adaptability, compassion, and flexibility. There is a danger, however, that our systems of evaluation reward conformity, regurgitation and rigidity. The danger exists and thrives in those places where evaluation and measurement are defined as synonymous. Evaluation may include measurement, but the root of the word is "value." Therefore, to evaluate is to make a judgment of worth based on the relevant data.

Dissertations completed last June at USC by House and Diamond studied sixteen educational goals for elementary children formulated by parents. The goals were then prioritized by teachers and parents. The goals rated 1, 2, 3, and 4 by parents and ranked 3, 4, 1, and 2 by teachers were: 1) to develop a positive attitude toward learning, 2) to develop a sense of honesty and fairness with respect toward other people, 3) to build a positive realistic self-image in order to accept the rewards of success and the consequences of failure, 4) to recognize one's self-worth and develop an awareness of his potential contribution to society. All the top four goals were decidedly in the affective domain. Reading, incidentally, was ranked sixth and eighth and math eighth and sixth by parents and teachers respectively.

Assuming their findings are generalizable, one wonders how many schools have objectives and activities aimed at their top-ranked priorities and how or whether they are being evaluated-translated for staff and community. We can answer in the affirmative if: we can define the problems that need to be addressed, if we can identify the criteria used to determine that a problem exists, if we are willing to collect appropriate data, and if we are willing to accept indicators of change and not insist on sophisticated instruments and statistical treatments that tend to measure elephants with a micrometer when all we need to know is whether the elephant is bigger than a horse.

SYMPOSIUM I

DIVERGENT PERCEPTIONS OF INSTRUCTIONAL IMPROVEMENT STRATEGIES

Chairman: Dr. Jack M. Thompson
Director of Instruction & Guidance
Sonoma County Schools

Participants: Madeline Hunter, Principal
University Elementary School - UCLA

Eva Baker
Assistant Professor of Education
UCLA

APPRAISING THE INSTRUCTIONAL PROCESS

Madeline Hunter

(Madeline Hunter is Principal of University Elementary School; Lecturer, School of Education; Director, Project "Linkage," at the University of California, Los Angeles. She received her B. S., B. A., M. Ed., and Doctorate degrees from the University of California, Los Angeles.)

Clouds of mysticism have shrouded the process of instruction, obscuring cause-effect relationships. Attempts to pierce this veil have been resisted by some who would retain the mystery and rely on intuition to guide instruction. Others of us, impatient with unnecessary learning failures, are seeking ways to bring predictable learning success under our span of instructional control. As a result, a Teacher Appraisal Instrument (T. A. I.) has been developed which makes successful learning predictable and successful teaching explainable.

Two basic generalizations, free from informed contradiction, guided our search. These generalizations constitute invarient principles which are applicable to all learning situations regardless of content, the learner's age, previous experience, ethnic or socioeconomic derivation.

The first generalization is related to the incremental nature of learning. Learnings are built one on the other with basic learnings supporting and making possible more complex learnings. It is impossible for a learner to achieve a higher order learning, without also having achieved the subordinate learnings which support it.

The second generalization which focused our efforts, is related to the factors affecting learning which are accepted and validated as basic principles by all learning theorists regardless of their particular conceptual orientation. These factors respond to instructional manipulation and affect a student's motivation to learn, the rate and degree of his learning, his retention of that learning, and his

ability to transfer that learning to new situations where it is applicable. While these factors may take different form with individual learners, as principles they are invarient to all learners.

As we at UCLA began to apply these two basic generalizations to the appraisal of the instructional process, a third encompassing insight into the teaching-learning process emerged as critical. We learned that time is the coin of teaching and it is expended to "purchase" learning. Like all currency it can be expended wisely or frittered away with nothing to show for its use. Wise investment of instructional time to produce efficient and effective learning is determined by the valid implementation of the two basic generalizations. Wasteful squandering of instructional time is the result of actions which are in violation of these two generalizations. Consequently, any evaluation of the instructional process must be based on the investment of the learner's time (whether such investment is consonant or dissonant with current knowledge related to human learning), in terms of the following questions:

1. Is the instructional process proceeding toward a perceivable objective, or is it a meandering path where time is dissipated without appropriate learning gain? Additional learnings which are complementary to the target learning are encompassed in the term "appropriate," but learnings that are interfering, tangential or antithetical to the objective are deemed inappropriate. In this way, learning time is focused and effectively used rather than being happenstance, random or diffused with little or no desirable learning return for the time and effort of student and teacher.

A positive answer to this first question in no way eliminates creativity or imposes rigidity. If a tangential or nonrelated learning objective emerges from the student, the original objective may be altered to accommodate it or the tangential learning may be referred to a future instructional episode.

2. Is the instructional objective at the right level of difficulty for the learners who are investing time? This implies that the particular learning step being taken toward the objective is an achievable one by these learners--not an objective that is so difficult its achievement is impossible or one so easy it requires no learning effort or it has already been achieved.

3. Is there constant monitoring of the degree of achievement of the objective so redundance or acceleration can be built into the instructional process if either is indicated? "Dip sticking" is the term which indicates that "soundings" are taken at frequent intervals to validate learning achievement before moving ahead as well as to avoid investing time on a learning that already has been accomplished.

These first three questions are related to content--the "what" of learning.

The next two questions used to appraise the instructional process involve the "how" of learning, or the congruence of the learners activity and effort to principles which research has demonstrated to be facilitating or accelerating to learning. For convenience, these principles have been categorized into four groups (1) those principles that affect the learner's motivation; (2) those that affect his rate and degree of learning; (3) those that influence his retention of what he had learned; and (4) those that contribute to his ability to transfer the learning he achieved to new situations where that learning is applicable.

Based on these categories of learning principles, the fourth and fifth appraisal questions are asked:

4. In which ways are the time and energy expended by learner and teacher consonant with principles of efficient and effective learning?

5. Is there dissonance between time and energy expended and principles of learning? If so, which principles are being violated?

The T. A. I. is similar to the evaluation of the nutrient qualities of food regardless of the particular menu or the way it is served, for any appraisal of the instructional process must focus on the invarient "nutrients" which promote human learning.

As a result, the T. A. I. is applicable regardless of whether a teacher is working with one learner, with a small group or with a total classroom, to any instructional process when a learner is working by himself, with a friend, with an instructional module, programed instruction, textbook or worksheet, to the self-contained classroom, team teaching, open structure, individualized instruction, nongraded or whatever organizational program is in effect.

The T. A. I. is only in its infancy, but it is a robust infant that has promise of growing into a curriculum guide for the preparation of teachers, a diagnostic instrument to direct staff development and a valid instrument for evaluation of professional performance in the classroom.

GRUBBING FOR INSTRUCTIONAL IMPROVEMENT TRUFFLES

Eva L. Baker

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The credibility of the schools rests in part on the public's assumption that teachers know how to teach and that schools are important places for children to be. Reflect for a moment on the state of the educational world if these propositions were not widely held.

The schools and the people who work in them may be facing an exciting but potentially risky test during the next few years. The issue that will race before us is mildly named "instructional improvement." Instructional improvement has been a tone chimed by in-service coordinators as effortlessly and predictably as the noon bells at UCLA. The music may now be changing.

Instructional improvement implies at least the following set of conditions.

1. Instruction (defined as you wish) exists.
2. Instruction will recur.
3. There is some basis for expecting improvement.
4. There is a way to determine if improvement has been made.

The reason that instructional improvement will become a serious issue relates to points 3 and 4 above. Until recently, bases for anticipating and determining instructional improvement were not widely implemented in our schools. We have learned these last few years another term for these activities: evaluation.

A flashback to instructional improvement practices might be helpful at this point to promote recognition of why we are in such a dramatic time. In previous epochs, teacher behavior was assessed by judgments or rating of process. A teacher might be given an overall evaluation as excellent or poor by his or her supervisor. The criteria for such evaluations may have been less specific than some desired. However, when the criteria were articulated, as in some teacher evaluation scales developed for use with student teachers, the dimensions selected were often only tenuously related to the act of teaching. Other approaches to the assessment of teachers have been more specifically geared to instruction. For instance, a lesson might be taught, and then the supervisor might discuss with the teacher particular aspects that seemed to need improvement. The teacher's lecture style or organization might be identified as deficient or a discussion session might be criticized because it did not involve all participants. The problem with

this approach to instructional improvement should be clear on the basis of experience. It is stark when research evidence is consulted. The single, undisputable fact of life is that there is no evidence to support that a given instructional method will unalterably succeed with all learners in all tasks with all teachers. There aren't even methods that have reasonable probabilities of success in very limited situations. Thus, all the attention directed to process and use of methods in the absence of suggestive, let alone compelling data, probably contributed very little in terms of improving the instruction that our children received.

The critical linkage, of course, is the relationship between any instructional improvement recommendation and its likelihood of modifying student performance. If instructional methods have not proved fruitful in terms of student performance, lines of research have identified certain instructional variables that are positively related to learner achievement. In simple terms, this means that teachers who tend to use given variables or principles in their instruction tend to have students perform significantly better. Variables are method-free. They can be used in different tasks by teachers with different personal styles. Barak Rosenshine and Norma Furst reported on eleven such variables that were positively related to achievement in a number of independent research studies. Some observed variables like "clarity" suffer because the ratings were highly inferential. A teacher was judged to be "clear" in presentation, but specific behaviors or criteria for clarity were not described. Thus, training someone to be "clear" was not all that easy. Rosenshine and Furst identified a small set of instructional variables that could be observed directly with only a minimum of inference. These variables or principles could be taught to teachers with only minor problems in translation from the research setting. Two of these variables had very strong support from research: providing students the opportunity to learn criterion performance and task orientation of teacher.

Work at UCLA and at the University of Illinois may have extended the list of powerful principles. In a series of studies at UCLA the following principles were significantly correlated with short term measures of student achievement:

Practice (opportunity to learn criterion material).
Prompting (reducing the cues that sequence practice).
Individualization (attempting to differentiate instruction for subgroups of learners).
Knowledge of results (informing the learner of the adequacy of responses).

Of considerable interest to me is that certain variables also correlated significantly with the interest levels of the learners. Principles that were significantly related to interest ratings were:

Practice
Knowledge of results
Motivation (attempting to explain or induce a reason for the instructional activity)

Yet, the move toward accountability and serious evaluation of the performance of students must encourage us to make use of research of this sort, even at its present, inconclusive level. Perhaps, we can head off the frightening prospect that may await us in the schools: the specter of poor achievement and no way of remedying the situation.

SYMPOSIUM II

IMPLICATIONS OF THE NEW STATE TESTING PROGRAM

Chairman: Dr. Jerry C. Garlock
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Participants: Edwin Larsen
Director of Research
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THE NEW STATE ASSESSMENT PROGRAM: BOON

OR BOOMARANG

Edwin P. Larsen

(Edwin P. Larsen is Director of Research for the Oakland Public Schools. He received his B.A. and M.A. degrees from the University of California, Berkeley.)

DECADE OF DEBATE AND COMPLAINTS

Since the first State Assessment Act sponsored by Winton in 1961 went into effect, millions of dollars and millions of hours of teachers' and students' time have been invested in administering standardized achievement tests to elementary and secondary school youngsters. School practitioners, and in recent years, some community spokesmen have complained vociferously regarding many aspects of the state testing mandates. However, legislature has held tenaciously to their demand for evaluative feedback on the effectiveness of California's multi-billion dollar educational program.

SOME SIGNS OF PROGRESS

After a decade of vociferous, and sometimes bitter, confrontation, criticism and debate a new "master plan" for statewide assessment has been formulated. The most apparent changes which are being discussed are: a clear swing to an assessment program designed to meet state needs only; a reduction in time and dollar costs to districts so that the local agencies can implement their own assessment plans; abolition of required "I.Q." testing; use of tests design for "California Objectives;" schools and districts are to be the units of measure as opposed to the individual as the result of the matrix sampling approach (there will be no student scores).

As a member of the district-level cadre which has been very critical of antecedent state assessment programs, the author believes that some highly significant "context," or process, changes have also occurred. For the first time, the legislature has recruited a broad spectrum of knowledgeable people in the area of measurement to help design the statewide assessment program.

Also for the first time, individuals and groups from the professional ranks have perservered beyond the level of critical rhetoric; that is, some positive suggestions for alternative assessment strategies have been set forth.

SOME CAUTIONS AND SOME PROBLEMS

There are hopes of moving statewide assessment from the level of a useless irritant to an instrument for improving the educational opportunities for California's youth. However, we have not arrived at that point yet. Following are some issues and concerns which still persist.

The Entry Level Test is, perhaps, the same old I.Q. goat in sheep's clothing. No I.Q. scores, in traditional terms, will be generated for individuals, schools, or districts. However, it seems that the new assessment plan will rely heavily on the old, simplistic "aptitude-achievement" prediction model. If the entry level test is, in fact, viewed as an aptitude test, we will be back at the point we were. There is the distinct possibility that we will fall back onto the old phrases, such as "These students have performed on achievement measures 'as well as may be expected'." This can constitute the most insidious type of low expectancy syndrome of all

The reliability of the data base (scores) should continue to be a matter of concern. Those involved with the mass state assessment programs of the 60's know of the variety of problems which have arisen in the poor administration of the tests, the incomplete reporting of scores, and a number of other obstructionistic devices which have plagued the state testing program from time to time. The large proportion of unexplained variance seen in the correlational analyses undoubtedly grows not only from the nature and refinement of the predictor (independent) variables but also a substantial error factor in the predicted (dependent) variables. The existance of hundreds of thousands of pieces of data is no real substitute for reliable input into research studies and this may continue to prevent the discovery of meaningful and useful information in the state assessment program. The only answer to some of these problems will be continuing efforts to win general acceptance of the programs.

The usefulness of the data generated by the new assessment program may or may not be greater than in previous programs. The folly of mass regression studies has been demonstrated well in recent years. From a practitioners point of view there have been no substantial or productive insights in to the effectiveness of various program and/or policy alternatives growing out studies at the State or National levels. The factors which have been shown to account for the variability in classical achievement indexes are not those over which the educational institutions have, or hope to, have no direct control.

Some new technologies or some better application of existing technologies will have to be brought to bear. The power of the computer is no substitute for good research methods. The State Department of Education has proposed using standard regression model approaches to identify clearly discrepant (high or low) performance and then to follow this with in depth investigations to verify the reliability of these observations and to illuminate the practices or factors which appear to contribute to substantiated variations in achievement performance. Perhaps this may yield some information useful to decision-makers at state and local levels. If this does not occur, schools throughout the state will continue to be plagued, rather than assisted, by the state assessment program.

NEW DIRECTIONS FOR THE CALIFORNIA ASSESSMENT PROGRAM

Dale Carlson

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Although a number of modifications have been made to the California statewide testing program since its inception in 1961, the most far-reaching revisions are now being made as a result of AB 665 of 1972. In order to properly understand the direction and dimensions of this program, it is essential that the underlying assumptions about the assessment program and its purposes be considered. Seven key postulates are presented below.

1. The primary purpose of any testing program (or evaluation system) is to provide information to assist in decision-making.

2. The variety of types of decisions to be made demand that information be collected and reported at various levels of specificity (in terms of content or objectives) and various levels of aggregation (in terms of the data unit; pupil, school, district or state). Obviously, the information which a teacher needs to make decisions related to specific pupils would be of little use to a legislator, and vice versa.

3. To be useful for program improvement, the results of an assessment must be reported for each of the accepted program objectives.

4. To arrive at the most complete and accurate evaluation of a program, the results must be presented in both absolute and relative terms, i.e., they must be both criterion referenced and normative-referenced. The "actual" or "real" performance of the pupils must be presented as well as a description of that performance in comparison to (1) a general population, like all other schools, and (2) to a specific reference group, like all similar schools.

5. A single assessment program designed to serve the needs of all consumers of pupil achievement data would be restrictive and inefficient. For example, a highly differentiated criterion-referenced assessment system mandated for use with all pupils in all districts in the state would be excessively expensive and would probably be inappropriate for many districts.

6. The main function of a statewide assessment program should be to provide information to assist in making decisions with statewide impact. This information should be gathered most economically, absorbing a minimum of instructional time for testing. Since the information is for use primarily by the state, the cost ought to be borne primarily by the state. The district and school would then be free and responsible to develop assessment programs which provide information for making all decisions at the district, school and classroom levels.

7. There is sufficient justification for an assessment program which is focused on providing information for state level purposes. Such a program must be designed to answer the following types of questions.

- On the whole, how are California pupils progressing in mastering the basic and advanced educational skills and learnings?
- Should education receive a greater or lesser proportion of the state's resources, in comparison to welfare or ecology?
- What are the areas of greatest need in California education, e.g., reading, math, drug abuse education?
- Which districts and schools have particular needs for additional assistance or resources?
- What are the characteristics of unusually effective programs? How can information about those programs be used to improve other programs?
- What is the statewide impact of special categorical programs and projects, i.e., the Miller-Unruh Program?

With this background, the dimensions of the revised program can be explained more rationally and evaluated more fairly. The major features are outlined below.

1. The test administered to all pupils in grade one is no longer a reading achievement test. Rather, it is an assessment of readiness for typical school instruction. It is a relatively short test which is very easy for most children. Its purpose is to provide information on the entry level skills of <u>groups</u> of pupils. This information will be used to identify similar schools and districts, so that test results from grades two and three can be interpreted in relation to the entry level of the pupils.

2. Testing in grades two and three (reading) and in grades six and twelve (reading, math, spelling and effectiveness of written expression) will be tested on a matrix sampling basis. <u>All</u> pupils will continue to be tested, but each pupil will take a very short subtest, representing only a portion of all questions on the full test. This type of testing yields information on a wider array of instructional objectives while decreasing the amount of testing time.

The spring of 1974 will see the implementation of this program in grades two and three. Grades six and twelve tests will be developed for use in 1974-75.

3. A substantial portion of the financial burden of the program will be shifted from the districts to the state. All costs of the grade one program will be borne by the state, as will the costs for all test materials at the other grade levels.

4. Test results will only be calculated and reported for

groups of pupils, i.e., for schools and districts. This method yields reliable data for all primary purposes of the program without interfering with local assessment programs designed for pupil diagnosis or teacher evaluation.

5. It is an objectives-based program since common sets of instructional objectives have been developed. Only those objectives will be assessed and the results will be reported according to those objectives.

6. Test results for schools and districts will be reported in terms of the average percent of pupils answering a set of questions correctly. This information will be analyzed and interpreted in comparison (1) to all schools and districts and (2) to schools and districts with similar characteristics. Operationally, this last type of comparison will probably continue to be done with the help of multiple regression analysis whereby the mean for a school or district is compared to its predicted mean.

SYMPOSIUM III

COMMUNITY INVOLVEMENT IN EVALUATION AND INSTRUCTION: A REASONABLE ROLE

Chairman: Edwin Larsen
Director of Research
Oakland Unified School District

Participants: Henry Mestre
Educational Consultant
Spanish Speaking Unity Council

Keith Echeverri
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COMMUNITY INVOLVEMENT IN EVALUATION AND INSTRUCTION

Henry M. Mestre, Jr.

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When I first learned of the topic assigned to this panel, I rather welcomed the opportunity to share some of my experiences as a lay participant in the educational process. However, my initial elation gave way to feelings akin to those Daniel might have experienced when he entered the lions' den. The topic itself, "Community Involvement in Evaluation and Instruction," was the principal source of my misgivings. The use of the word "community" sets educators in one camp and the "community" in another, hinting at the adversary situation that is frequently present in school-community relations. An examination of my experiences in this area added to my concern and confirmed the existence of a barrier between educators and the communities they serve; a wall whose stones include fear and cultural differences, but whose keystone is a myth propagated by educators and generally accepted by the lay public. That myth simply stated is that the lay public does not have the skill

or knowledge to presume to tell educators how to do their job or to do their job.

However, the increased cost of education and its decreasing effectiveness, admittedly measured by crude evaluative instruments, have led growing numbers of parents and other lay people to seriously question what goes on in the classroom and to demand more meaningful roles in those activities. Why? Because schools don't exist in a vacuum. They are an integral part of the community; preparing its citizens, particularly the young, to function effectively in the community and to participate fully in its democratic processes. Beyond these communal goals, schools also have a responsibility to the individual; building character on the foundation of values laid by the family.

These practical and moral imperatives have propelled an assault on the barrier between schools and their communities. Federal, state and, in some instances, local statutes and policy have provided the vehicles for the assault. Over the past few years, parent and community advisory groups have increased greatly along with the use of lay instructional assistants. Today, many educators and members of the lay community find themselves in terra incognita exploring the limits of a new relationship.

Returning to what I have called the keystone myth we find that educational skills and knowledge do have a bearing on the limits of effective community participation, but not as an inviolable or exclusionary barrier. The real limit comes from the capacity of the lay public to acquire the skill and knowledge necessary for meaningful participation in the educational process; whether it be in evaluation and instruction or in policy making and planning.

Naturally, this point of view places an added responsibility on the educator: to provide the lay community with a better understanding of the science of learning. Is that science so arcane that the lay public cannot be involved in its practice without extensive preparation? Newer forms of teacher training such as Teacher Corps seem to indicate that it isn't. If a college senior with minimal training can begin practicing the profession, why can't a lay person, whose life experiences are much broader, play any equally important role in the classroom or in the evaluation of classroom activities?

There are a variety of experiences in daily life that give the average lay person a sound foundation on which to build more precise knowledge of education. Anyone who has ever worked sooner or later has had the experience of "breaking in" a new employee. Anyone who plays has had the experience of teaching a newcomer the rules of the game.

To get a better sense of this concept, let's take a parent as an example and eavesdrop on an imaginary, but not improbable conversation:

Parent: "How old are you?
¿Cuantos años tienes,
Juanito?"
Child: "Three, ¡tres! (Holding
up three fingers)."
Parent: "¡Muy bien! (Hugging
the child)."

In this brief encounter we find excellent examples of bilingual instruction and positive reinforcement. The parent doesn't know these names, but has an instinctive understanding of the learning process. In every sense of the word parents are the child's first teachers and their instruction isn't limited to toilet training. They are the ones who create the environment in which the child learns to walk, to talk and the rudiments of rational thought.

It is the responsibility of the educator to recognize and respect these and other experiences the interested lay man or woman brings to the school. This element has been present in every successful school-community activity with which I have been associated. The second ingredient has been timing. The educators responsible for these projects have built in the lead time necessary to bring everyone up to a point where they are approximately the same level. They have also provided the participants with printed background material; very often material they have prepared themselves specifically for this purpose.

Certainly, the few points made here don't answer all the problems encountered in the area of community involvement. Most educators, if they are at all receptive to the idea of community involvement, seemed to be more concerned with the number of participants than with the quality of participation. If you plan a meaningful role for the lay participant and the

experience gratifying, attendance isn't really a problem. Developing a new mental set about the ability of the lay community to absorb the knowledge necessary for effective participation in learning activities is a giant step toward a successful experience. Hopefully, the accumulation of successful experiences will bring down the wall that separates the school from the community it serves.

COMMUNITY INVOLVEMENT IN EDUCATIONAL DECISION-MAKING: AN EMERGING ROLE

Keith Echeverri

(Keith Echeverri is Chief Consultant to the Joint Committee on Educational Goals and Evaluation of the California Legislature. He received his B.A. degree from Pomona College and his M.A. from Claremont Graduate School and University Center, where he was engaged in doctoral studies before going to Sacramento.)

Whether and how the community should be involved in educational decision-making depends on the function of the school as a social institution.

Why do we have schools?

The answer to that question will disclose the answers to the previous questions concerning the role of the community in education.

It seems to me that we are torn between the idea that the school is a place where children are socialized and the idea that school is a place where children seek out personal discoveries and meanings.

Many people may see those two goals as mutually exclusive or mutually supportive; the position depends on one's view of the nature of man. If man is inherently evil, he must be taught to live without inflicting harm on others or be punished. If man's natural instincts lead him to get along, to accept others and to love, then personal freedom need not be feared or taken away.

The point is this: if schools are primarily socializing institutions, where literacy, social adjustment, and job placement are the important goals, then the role of the community in educational decision-making should be one of perpetuating the status quo, establishing performance standards for students and school personnel, providing basic maintenance systems, and generally protecting and preserving law and order.

If, on the other hand, the schools are viewed primarily as human growth centers, where self-esteem, intellectual and creative curiosity, and self-actualization are the important goals, then democratic principles should be incorporated within the context of a dynamic, changing, person-centered organization. In this environment, the resources of all school=community members would be valued, and their participation would be meaningful.

The question may be whether we want to nurture followership or leadership. At different times we all should have the capacity for both; the question is one of emphasis.

Aside from this central issue of the purpose of schools in relation to society, there are other than functional reasons for community involvement which few school boards and administrators can ignore.

Political support for schools is necessary to gain revenues, maintain programs, and retain personnel.

Public relations must be positive and supportive to assure that schools project a popular image within the community.

Finally, there are moral and philosophic bases for community participation in a democratic society which claims to value individual rights and responsibilities.

Given all the reasons for including community members in educational decision-making, the strongest argument rests on one's view of the purpose of schooling.

If students go to school to be told how to behave and what to know, then the community need not become really involved, because they've already been told (that's why the "new Math" is such a problem).

However, if students go to school to learn about themselves and develop their own perceptions of the world, then parents need to be actively involved in learning and growing with their children, so that they will be able to relate and communicate and share perceptions with their children.

Growing together -- parent and child, teacher and student, school and community -- would be the mark of a good educational process.

Recently a brain-storming session was held in Sacramento to develop ideas for improving the chances that community people will be meaningfully involved in educational policy decisions. I think you will find the results interesting

especially since the contributors hold important positions in such established California groups and agencies as PTA, League of Women Voters, Women For, NAACP, the Department of Education, County School Offices, and the Legislature.

The results are presented both in summary and as a list of the best individual ideas. The summary statement was developed and supported by the contributors.

SUMMARY OF MEETING

Question asked: "What steps can be taken to improve the chances that community people will be meaningfully involved in educational policy decisions at all levels?"

Summary:

I. To achieve meaningful community involvement we believe school districts should be required to have elected school=community committees at each school with certain delegated responsibilities to work with administrators and staff in budget, personnel and program decisions.

II. Legislation developed to accomplish the above must include a well defined vehicle for delineating responsibility between the District Board and the local school= communities.

A. Training programs must be established for administrators, staff and community in all that is involved in productive participatory management

1. Hire community people as consultants
2. Outside analysis of decision-making process

B. Have an ombudsman for the citizenry (on the Board payroll) with full authority to seek information anywhere in the school system, reporting to the citizenry as well as the Board.

INDIVIDUAL IDEAS

<u>Related to Boards of Education</u>:

1. Elect responsive school boards

2. Have an ombudsman for the citizenry on the Board payroll, with full authority to seek information anywhere in the school system.

3. Student involvement on Boards of Education

4. Delineate authority of Boards as elected representatives of the people

5. The Board and administration should accept feasible community recommendations

Related to training:

6. Select and train administrators to work with the community (interpersonal relations)

7. Provide trained discussion leaders and recorders at meetings

8. Increase awareness of model programs (alternatives)

9. Locate and publicize successful models of responsive government

10. Community representatives will need training

Related to school=community committees:

11. Mandate a share of decision-making beyond advisory capacity of councils

12. Set out clearly the opportunities and the limits for decision-making. Establish and publicize a contract. Don't make promises that can't be kept. Define advisory and authority.

13. In many cases, a parental pressure or advocacy group is necessary -
    a. Beat on the doors; demand a share of decision-making
    b. "Sell" community ideas to Board

14. Ad hoc community groups formed to make recommendations to the Board instead of to the administration

15. Elect school committees with certain delegated responsibilities to work in cooperation with administration in budget, personnel and program decisions

Other ideas:

16. Parent involvement as classroom aids

17. We must first describe why community involvement is important -- roles will come from that

18. Administrative reports at public meetings on educational practices and progress

19. Hold hearings, debates on policy issues -- on neutral premises -- with administrators present as witnesses or participants

20. Outside analysis of district decision-making processes

Most of the conclusions reached at the meeting point toward legislative mandates of new public governance structures. It will be interesting to note whether or not other means/methods of achieving effective community involvement are tried, and by whom, and where. Educational leadership will be in view as we watch. We may even choose to lead.

SYMPOSIUM IV

RENOVATING INEFFECTUAL EVALUATION PROGRAMS

Chairman: Dr. Lester Ristow
Retired

Participants: Marvin Alkin, Director
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Robert C. Otto, Assistant Superintendent
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REORGANIZING SCHOOL DISTRICT EVALUATION DEPARTMENTS

Marvin C. Alkin
Robert C. Otto

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Organized evaluation activities in most school districts just simply "growed like Topsy." And, their location within organizations and the way in which evaluation is conducted is evidence of this. The increase in testing in school districts, requirements for evaluation of Federally funded programs, needs assessment in California, and other evaluation activities have been introduced at different times, shunted to available district personnel, and frequently find themselves in disparate parts of the same organization.

These are not surprising findings. The nature of a bureaucracy dictates that management start with the program that exists and simply add on new functions where they "fit best." Frequently this leads to organizational structures that lack rationale, are inefficient and improperly staffed and only make logical sense to insiders because they carry the brand of familiarity.

Some school districts have evaluation departments that are merely extensions of the existing testing unit and whose personnel, while they know tests, are insensitive to the procedures necessary in formative or summative evaluation. Some school districts charge the "Federal project director" with evaluation responsibilities--seeming to say that only Federal projects need evaluation (which is all too frequently the practice). Many school districts have charged a curriculum coordinator or other such district office personnel with the responsibility for State-required needs assessment, without recognizing the obvious tie-in of this procedure to the establishment of a district-wide evaluation and testing program.

We would maintain that it is time for school districts to reconsider the role of evaluation. It is time to consider a rational evaluation role unencumbered by existing allocations of responsibilities. It is time to try to make sense of the role and function of evaluation in school districts. In this oral presentation the authors will present some thoughts on reorganizing school district evaluation units. It is time.

SYMPOSIUM V

EVALUATING AND IMPROVING THE QUALITY OF INSTRUCTION IN HIGHER EDUCATION

Chairman: Dr. Ezra Wyeth
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Participants: Robert C. Wilson
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Lynn Wood
Assistant Director, Teaching Innovation and Evaluation Services
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EVALUATING COLLEGE TEACHING ON THE BASIS OF INFORMATION NEEDS FOR WHAT? BY WHOM? AND WHAT FOR?

Robert C. Wilson and Lynn Wood

(Robert C. Wilson is Director of Teaching Innovation and Evaluation Services (TIES) at the University of California, Berkeley. Lynn Wood is Assistant Director of TIES.)

Historically there have been three primary purposes for evaluating instructors and courses at the college and university level. Each of the purposes has corresponded to the information needs of a different segment of the academic world. Students have desired such evaluations primarily to assist them in making choices among courses and instructors. Faculty review committees and college administrators desire such evaluations to give them the kinds of documentation of teaching effectiveness which are increasingly required in making promotion and tenure decisions. Individual faculty members require various kinds of "feedback" to assess their own effectiveness as teachers and to make informed decisions about desirable changes in their courses and methods of instruction.

One way of defining evaluation is: the gathering of information relevant to one's needs to make decisions, making judgments about that information, and making decisions on the basis of those judgments. When the nature of the decisions to be made differs, information needs can be also expected to differ. That is not to say that some of the same information about courses and instructors might not be useful to students, administrators, and individual faculty members; it is unlikely, however, that a single set of information or a single evaluation procedure will best serve the needs of these three groups.

If the evaluation model suggested here is felt to be a valid one, it follows that efforts to initiate a successful, i.e. useful program of teaching evaluation require careful preliminary study. The first question to be addressed is: For what purpose is the evaluation being undertaken, i.e., what kinds of decisions are expected to result from the evaluation? Who will make those decisions? What kinds of information does that group feel that it needs in order to make those

decisions? Once these major questions have been answered, subsequent decisions about the evaluation procedure itself may be somewhat easier to make because, in part, they will be dictated by the information needs of the decision-making group. Some of the parameters of teaching evaluation which might be expected to vary in interest and importance to the three decision-making groups include:

a) the scope of information (e.g., all instructors? all courses? every term?)

b) the source of information (e.g., present students? former students? colleagues? the instructor himself?)

c) the kind of information (e.g., data on the instructor's objectives? communication skills? presentation styles? accessibility to students? data on the course format? assignments? grading? data on student's motivations? interest and enjoyment? learning gains?)

d) the method of gathering information (e.g., end-of-course questionnaire? interviews? pre-and post-tests of student change? colleague visitations? videotape and interaction analysis?)

e) the specificity of information (e.g., broad descriptors known to be generally related to teaching excellence? detailed items on the structure, content, and conduct of a given course?)

f) the format used in reporting information (e.g., raw data? narrative summaries? statistical summaries? means? percentages? comparative norms? graphs?

g) the reliability and validity of information (e.g., preliminary or concurrent research as part of the evaluation process? pilot studies? use of pre-tested instruments?)

Up to this point we have drawn a kind of rough map of an approach to teaching evaluation which is based on the information needs of decision-making groups within a college or university. Along the way we have illustrated how different information needs might lead to the adoption of quite different evaluation procedures. In order to illustrate more concretely how this approach can be applied for improving instruction in colleges and universities, we would like to share two "case studies" with you. Each of the "case studies" is in effect a composite of several real-life situations, bringing together the best features of those real world (and therefore imperfect world) examples.

A. The development of a student guide or handbook to courses and instructors.

B. Faculty use of alternatives to end-of-course evaluation procedures for the improvement of courses and teaching methods.

In each of these case studies, the emphasis is on selecting an evaluation procedure which will yield the kinds of information which the respective groups require if they are to make informed decisions which will improve the teaching and learning environment. Taken together, these "case studies" illustrate how the improvement of college university teaching can be approached from two major vantage points; one hopes to the advantage of all.

SYMPOSIUM VI

EMPLOYING CRITERION-REFERENCED MEASURES FOR INSTRUCTIONAL IMPROVEMENT

Chairman: Dr. Carmen J. Finley
Director of Assessment and
Principal Research Scientist
American Institutes of Research

Participants: Dale I. Foreman
Director, Test Development
Westinghouse Learning Corporation
Iowa City, Iowa

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SCORE AN OBJECTIVE-REFERENCED EVALUATION SYSTEM

Dale I. Foreman

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Objective-referenced (or criterion-referenced) testing has become a key word in classroom and school evaluation. Many major testing groups have begun the development of test instruments that directly reference the test items to measurable objectives which are considered important outcomes of the learning process. School districts around the country are also beginning to focus attention on the implementation of a pilot program using some criterion-referenced instrument. Some areas have gone to the point of full implementation of a criterion-referenced program in one or more grades and subjects.

Westinghouse Learning Corporation, in the last year, has joined the bandwagon. The test development staff has spent the last year developing SCORE (School Curriculum Objective-Referenced Evaluation). SCORE is made up of four basic components. 1) SCORE is objectives; 2) SCORE is objective-referenced items; 3) SCORE is custom test generation; and 4) SCORE is scoring, reporting, and interpretation.

The SCORE objective bank was developed in such a way as to avoid reinventing the wheel. Objectives were obtained from many sources (IOX, Downers Grove, PLAN*, as well as individual school systems). These objectives were screened to determine appropriateness and then the ideas incorporated into the SCORE objectives bank. In many cases, additional objectives were written to fill existing gaps. All of the objectives used were organized into a three level hierarchy. The first level (terminal objective) is a very broad goal-type statement which would not be appropriate for classroom use. The second level (intermediate objective) is more course oriented with a broad base. Finally, the lowest level (instructional level) is written for the classroom teacher. Each instructional objective covers a small segment of the content for a course.

The SCORE item bank provides measures for all of the instructional objectives in the system. These measures range in formats from multiple-choice items to individually administered performance items. All items are reviewed in terms of face validity (Does the item measure the objective?), appropriateness of reading level, and relevance.

SCORE works by involving the school district personnel in the selection of objectives that are considered critical for the children at each

grade level or in each grouping. This is done by choosing objectives from the catalogs and specifying the item formats desired for testing the objective. Once the objectives are selected, a machine-scorable booklet is created. This booklet contains items measuring only those objectives selected by the school district.

If the school district wants to test the same with more than one test to obtain growth measures this can be done also. Equivalent tests can be generated which measure the same objectives for use at different times during the year. The data can then be compared at the objective level to determine growth.

This system has been designed to customize testing for any district. Some very small districts, however, can join together in the selection of objectives to maintain economy.

One of the critical parts of any system is the reporting scheme. The SCORE reports have been designed with several audiences in mind. First is the teacher. The teacher is the one who must plan instruction, determine its effectiveness, and make critical changes which will better meet the needs of the students. This kind of information needs to be available for the class and the individual students by objective. The SCORE class list gives a mastery report for each student by object. It also summarizes each student's performance on all objectives and gives the teacher a summary of class performance by intermediate objective. The mastery of objectives is determined by a pre-specified criterion established by the school district, e.g. 80% mastery level.

For the school principal or supervisor of instruction, a school building report is produced. This report gives information on the performance of each teacher's classes within the building as well as a summary for the school building. The summary data for each building is also compiled into a district report. This gives an overall report of performance within the district and could be used as a school board report on instruction and curriculum change.

For the parents, there is a parent letter. This letter provides an ungraded verbal report of pupil performance. It states the intermediate objectives that have been mastered for the student and those which have not been mastered.

Other more standard reports have been included as a part of the total scheme. They include individual item analyses, rank order distributions, and percentile distributions.

WILL THE REAL CRITERION-REFERENCED TEST PLEASE STAND UP?

Jason Millman

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Several writers have expounded upon the distinctions between norm-referenced and criterion-referenced tests. Scores on the former are assessed by relating them to the test results achieved by some external reference group (i.e., norm group); criterion-referenced tests derive their meaning by having scores interpretable in terms of what the examinee knows or can do (i.e., performance).

A review of the literature on criterion-referenced tests reveals that many distinct concepts of such tests are being employed. The many types of criterion-referenced tests can be divided according to the purpose which they are intended to serve. Descriptive interpretations and decision-making are two major, distinct uses to which criterion-referenced information is put. Examples of common applications of criterion-referenced test uses and their relationship to the descriptive and decision-making distinction will be provided. Content standard, universe-defined, domain-referenced, objectives-based, and mastery tests will be discriminated.

Of utmost importance is the fact that appropriate item selection criteria, test construction principles, and validation techniques depend ultimately on the nature of the inference desired by the educator. Attention will be given to the different ways such tests might best be constructed and validated for both descriptive and decision-making uses.

CRITERION-REFERENCED MEASURES FOR INSTRUCTIONAL IMPROVEMENT: ARE THEY EMPLOYABLE?

W. Todd Rogers

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Instructional improvement depends upon many factors, the first being the generation of relevant information which can be used to describe the efficacy of the present instructional program or programs. Second, the curriculum supervisor, principal, department head and/or teacher must be willing to change if the information reveals an inadequate instructional program. Third, the responsible parties must be able to analyze alternatives and be able to implement suitable alternatives. Fourth, all must be willing to systematically repeat the cycle. The topic of the present symposium pertains to the generation of relevant information. Such generation is no guarantee that instructional improvement will necessarily take place.

The intention to employ criterion-referenced measures for instructional improvement is underscored by the growing demands for information on how well schools are fulfilling their responsibility to educate children. The difficulties associated with developing such measures in learning areas other than the minimum, basal skills and with their psychometric properties notwithstanding, one cannot fail to appreciate their importance. It is doubtful that our ignorance can be eradicated by a testing program yielding normative information. Available standardized tests, with their national focus, sample only that portion of the school curriculum common to all geographic and political regions of the country; they are unlikely to encompass the scope or penetrate to the depth of a particular instructional program. As they are now constituted, these tests provide normative information about pupils which can be used for classification and selectivity; they do not provide adequate knowledge about what skills and knowledges have been acquired by a pupil.

Criterion-referenced tests are deliberately constructed to yield measures that are directly interpretable in terms of predetermined performance standards. Such measures might be used to determine the efficacy of a particular instructional program in meeting a set of local instructional objectives or to determine whether a pupil has mastered skills considered prerequisite to his commencing a new learning task. The logical appeal of criterion-referenced measures for instructional improvement

resides in the notion that such measures should serve the function of monitoring instructional programs. By providing relevant, more readily interpretable feedback to both teachers and students of the intent as well as the degree of success in achieving the objectives or goals of the program, clearer information will be available as to what has and has not been learned. For example, the meaningfulness of a particular group criterion-referenced score (e.g. 65% of the grade 4 pupils know the basic multiplication facts) is dependent upon an agreed standard (e.g. 100% mastery of the multiplication facts at the fourth grade level) and not comparison with other groups. Similarly, the meaningfulness of a particular individual's score is dependent upon comparison with an agreed, predetermined level of mastery on a task prerequisite to further learning and not upon comparison with other testees.

Methodological Concerns

To set in advance what constitutes an acceptable set of goals or objectives or what constitutes an acceptable level of performance is more complex than one might initially perceive. There are few competencies for which complete mastery is possible. For the remaining, several questions might be raised: What is mastery? How does one justify a criterion other than 100% (say 80%) as a cutting score or indication of minimal competence? What are the procedures or methods for arriving at such standards? How does one construct the items or exercises to obtain the necessary measures? How do changes in wording of an exercise influence the examinees performance? Given these concerns, are there procedures now in use that have gained some respect?

Criterion-referenced measures have been successfully constructed for certain basic skills (e.g. the multiplication facts) and in areas where psychomotor objectives (e.g. driver training) are involved. Minimal levels of satisfactory performance are established on empirical grounds or logical grounds which are easily agreed upon. The General Educational Development (GED) tests, which use the actual achievement of high school graduates to establish minimum standards, is an example of an empirical approach to setting standards. Sources of empirically based criteria that may be appropriate for a local instructional program include the reported results of national and state assessments. The use of expert judgments is another common practice for setting criteria--although the questions "who are the experts?" and "how are these judgments combined?" are not yet fully answered. Task analysis of the skill or understanding to be learned might be useful in establishing minimum standards for each of the component subtasks. Examples of this approach have been given in arithmetic; however, task analysis appears much more formidable in other subject areas as well as in the higher learnings of algebra. In defining the subtasks, are all identified? Will the emphasis be placed on the product of each subtask, rather than on the processes themselves?

There are available several resources for obtaining objectives and objectives-referenced exercises that have proved acceptable in several situations. Although this does not eradicate the prespecified criteria setting problem, it does provide valuable information which, on

the basis of reaction to the results obtained may have post hoc criteria. Perhaps this might be a necessary first step in implementing a full criterion system.

A second major concern associated with the use of criterion-referenced measures revolves around their psychometric properties. The present paper will not address the points commonly considered except for questions of content validity. Several references on the psychometric properties of these tests are included as an addendum for those people unfamiliar with this aspect of criterion measure and interested in pursuing the matter.

Can instruction be improved through the use of criterion measures? Until a sufficient number of successful examples at the various levels (national, state, local) of education have been developed and replicated, caution should be employed. Before the potential contribution of criterion measures is fully realized, much developmental work must be done. Furthermore, in-service education will be needed to help insure good use is made of the process and available products.

SYMPOSIUM VII

THE EVALUATION OF ADMINISTRATIVE PERSONNEL

Chairman:

Dr. Wallace R. Muelder
Associate Dean
School of Education
University of Southern California

Participants:

Warren Linville, Superintendent
Montebello Unified School District

Dorothy Tillinghast, Principal
Lemay Street School
Van Nuys

Edward Beaubier
Assistant Executive Director
Association of California School Administrators

EVALUATION OF ADMINISTRATIVE PERSONNEL

Warren Linville

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Most of us can remember when the evaluation of a school administrator depended on such things as having a winning football team, membership in a service club or being an all-round nice guy. Sometimes it depended on the things he didn't do, like getting too involved in day-to-day classroom instruction, questioning vested interests or rocking the ship with new ideas. Of course, there were written evaluation instruments, usually in the form of check lists covering critical items such as "dresses appropriately", "supports and participates in professional organizations" and "displays enthusiasm". In the long run, however, the administrator who played his cards close to his vest and minded his "do's" and "dont's" was pretty much assured of a long tenure.

With the advent of the Stull Bill the opportunity for operational professionalism has made an appearance. Accountability is the word of the day. It has gained public support because we all like to feel that everyone else is accountable for everything that goes on in the world around us. The day of administration being a self-fed, self-perpetuating entity is about over. Instead we are beginning to realize that the primary justification for Administration is to promote and support the attainment of the educational goals in the community we serve.

Obviously a more systematic approach involving a wider audience must be involved. A check list assumes that the list covers the broad areas of competence but leaves out perhaps the most important and far-reaching element of professional evaluation known as self-renewal. The check list may point out good, not so good, poor or

very poor as viewed by the supervising evaluator but does little to serve the evaluatee in the all important area of self-renewal. A systematic approach designed through broader input than the immediate supervisor and involving a wider audience makes it possible for the evaluatee to gain insignts leading to real and meaningful self-renewal.

Recognizing that the dimensions of educational leadership are much broader and deeper than viewed, the Montebello Unified School District launched a systematic approach to administrator evaluation in the Spring of 1971.

The plan called a Management Support System contains several unique features. Among these are (1) the system was authored by the administraiors themselves; (2) following an assessment of individual needs, the administrator has the primary responsibility of evaluating the findings; and (3) the administrator and his supervisor jointly agree upon an individualized inservice plan for improvement.

The system, still in the process of development and refinement, began with agreement upon broad goals that would cover all conceivable activities. These goals were eventually cast into five Administrative Role Statements agreed upon by all administrators in the district. The Role Statements cover the areas of (1) evaluating and improvement of student learning; (2) personal plans for professional growth and self-renewal; (3) staff and student commitment to the school's educational purposes; (4) commitment of other school personnel, the community and profession at large; and (5) effective management of resources -- human, material, time and space.

Although consensus upon the role statements was an important first step, the statements were of little use until they could be translated into operational terms. Each of the twenty-seven principals of the district along with district administrators, selected the specific role statement they wished to develop. For more than a year, teams reviewed the literature of private and public administration, analyzing research instruments and synthesizing processes for assessing competency in each of the Role Statements. A unique requirement of the process was that assessment instruments had to be designed to sample the population to be served by the administrator. For example, the assessment of the level of participative management at a local site is made by the school staff served, not by an administrator at the district office.

Following validation of the selected operational procedures, an assessment is made by each administrator. The results of this assessment are analyzed and evaluated by the administrator who then develops a proposed plan for personal inservice activities. This plan is mutually agreed upon by the administrator and his immediate supervisor, resulting in an evaluation system based on the individual profile of professional needs and inservice activities designed for the administrator in his specific assignment.

THE ROLE OF THE PRINCIPAL IN THE AREA OF EVALUATION

AS AN EVALUATEE

Dorothy L. Tillinghast

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In California, with the Stull Act a very real part of our lives, we face mandatory evaluation.

As administrators, we have continual work in evaluation in terms of being an evaluator. This paper will attempt to look at the administrator's role as an evaluatee.

My frame of reference dealing with the Stull Act comes from my experience in the Los Angeles City Unified Schools, so this is what will be used for this paper. For example, the Personnel Assessment Department of the Educational Goals Section suggests that in Los Angeles eight areas of an assessment of performance have been selected that have reference to Board Rule 4310 (Stull Act as pertaining to the evaluation and assessment of management and service personnel). They are:

Administration	Instruction
Business Management	Personnel Management
Community/Public Relations	Plant Management
Human Relations	Pupil Services

In Los Angeles it is the evaluatee who determines what areas he will work in and what the assessment techniques to be used will be. We have been encouraged to make it practical - to set priorities - and to make what we select narrow enough to be feasible, to be something that can and will be accomplished. By way of illustration, we will follow just one area of possible performance. Let's follow through what might be done in the area of Community/Public Relations.

1. ASSESSMENT OF STANDARDS OF PERFORMANCE	
Plans for Meeting Standards, Goals, Objectives of District, Area, School, or Office	Assessment Techniques to be Used
COMMUNITY/PUBLIC RELATIONS: Organize an effective system of providing continuous newsworthy items for local newspapers.	Assessing of minutes, schedules, and records.

2. ASSESSMENT OF CERTIFICATED PERSONNEL COMPETENCE	
Plans for Performance of Duties as Related to Class Description	Evaluation Procedures to be Used
a. Identify ten opinion leaders within school service area.	a. Assessing the list and discussing how list was compiled.
b. Hold discussions with leaders to determine interests and attitudes of community.	b. Checking minutes of meetings.
c. Review with administrative staff and journalism advisers ways to meet the needs of, as well as to identify the attitudes held by, the community.	c. Reviewing schedules of meetings or minutes.
d. Coordinate planning sessions for the purpose of: (1) Determining policy of newspapers and deadlines (2) Developing a reporting system from each department (3) Preparing and submitting of reports (4) Pictorial support	d. Reviewing progress made following the sessions.
e. Review plans with staff and students to obtain reactions and recommendations for improvement of plans.	e. Assessing reactions and recommendations of staff.
f. Invite local press to school for a public relations luncheon and explain school plan.	f. Assessing interest and attitudes toward planning.
g. Implement plan.	g. Reviewing progress made and assessing interest and support.
h. Evaluate program.	h. Observing.

We need to utilize all possible avenues of learning how to evaluate others. There is work being done in the areas of observing, conferencing, and evaluating for effective supervision. Dr. Madeline Hunter at U.C.L.A. and Dr. John H. Hansen at Florida State University are two who have some interesting ideas in these areas.

By becoming adept in evaluating others, we learn to evaluate self and grow from it, thereby practicing self-renewal.

PROBLEMS IN THE EVALUATION OF ADMINISTRATIVE PERSONNEL

Edward W. Beaubier

Every successful manager-leader, whether in business or education, finds it advantageous to periodically check his intuitive insight into the operation for which he is responsible. This assessment may range from physical facilities to aesthetics, morale, and/or his leadership-managerial style. Usually, or far too frequently, the method of assessment is informal, consequently more subjective than objective for the manager has a tendency to observe or perceive only what he wants to observe.

The informal or over subjective type of evaluation of administrative personnel presents a major problem. This problem seems to come about when the following appear:

1. There is a lack of community substantiated school district goals and objectives.

2. School district has not set definitive administrative job descriptions.

3. No mutually agreed upon expectations for members of the administrative team exist--accountability.

4. There is a lack of pre-determined evaluation criteria.

5. There is a lack of valid data for evaluation of the administrator.

More and more modern manager-leaders are finding it to their personal advantage, as well as leading to the better achievement of the institution's goals, to utilize somewhat more formalized and objective assessment techniques to *validate their perceptions or to provide them new insights into areas which are problems or could soon become problems.*

However, one major problem area about which much has been written is the type of objectives or goals set and the way in which they are developed. Odionne, in a recent American Association of School Administrators publication, identified twenty of the most common errors in goal setting. A few of these errors follow:

1. The manager doesn't clarify *common objectives* for the whole unit.

2. He doesn't use prior results as a basis for using *intrinsic creativity* to find new and unusual combinations.

3. He doesn't clearly shape his unit's common objectives to fit those of the *larger* unit of which he is a part.

4. *He allows two or more individuals to believe themselves responsible* for doing exactly the same thing when he knows that having one responsible party is better.

5. He tacitly implies that *pleasing him* is what really counts, rather than achieving the job objective.

6. He doesn't probe to discover what his subordinate's *program* for goal achievement will be. He accepts every goal without criticism and without seeing a plan for successful achievement.

7. He ignores the very real *obstacles* the subordinate will face in achieving his goals, including many emergency or routine duties that consume time.

8. He fails to set *intermediate target dates (milestones)* by which to measure progress of subordinates.

9. He is *rigid* in forbidding the abandonment of goals that prove unfeasible or irrelevant.

10. He doesn't *reinforce* successful behavior or investigate unsuccessful behavior when goals are achieved or missed.

From the responses on an Educational Research Service questionnaire, "For what purposes do you evaluate administrative and supervisory personnel?" administrators indicated evaluations have been applied as follows: (Parentheses indicate number of systems reporting)

Identify areas needing improvement (77); Assess present performance in accordance with prescribed standards (70); Establish evidence for dismissal (60); Help evaluatee establish relevant performance goals (60); Have records to determine qualifications for promotion (55); Determine qualifications for permanent status (35); Determine qualifications for regular salary increments (9); Comply with board policy (8); Determine qualifications for merit pay (3); Comply with State law/regulation (3); and Point out strengths (2).

Experiences in the Association of California School Administrators Project Leadership indicate that problems in evaluation of administrative personnel can be reduced when an individual administrator (1) has mutually agreed upon product personal and process goals related to his job description and (2) has carefully designed a monitoring program developed cooperatively with those involved. We like to think of evaluation as being used for improvement--not to prove.

SYMPOSIUM VIII

EARLY CHILDHOOD: FABRIC, FANTASY AND FACT

Chairman:

Dr. Mabel C. Purl
Director of Research and Evaluation
Riverside Unified School District

Participants:

Robert C. Calfee
Professor of Education
Stanford University
and
Kathryn Ann Hoover
Research Assistant
Stanford University

Frank Sata, Architect
Member, Early Childhood Task Force
Instructor, Pacific Oak College

Frank Delavan
Manager, Early Childhood Education
Management Team
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POLICY AND PRACTICE IN EARLY EDUCATION RESEARCH

Robert C. Calfee and Kathryn A. Hoover

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A considerable body of research now exists concerning the effects of formal and informal education for children between the ages of three and nine. What is the value of this literature for those responsible for policy decisions? How useful is it for practical purposes in the implementation of early education programs? What form should future research take in order to be most helpful to planners and decision makers? The purpose of the present paper is to discuss these questions in a general way, and illustrate the key points with pertinent examples.

Planning an educational program requires that we give thought to existing needs and resources, and to future goals. Since needs seem often to outstrip resources, we must establish priorities, look for ways of using available resources as efficiently as possible, and seek to develop new resources. The immediacy of present needs can easily oversha-

dow and forestall any serious consideration of future possibilities; for better or worse, educational goals tend to focus on what is right now rather than what might be.

An objective, analytic, rational and open-minded search for facts - which typifies research at its best - can help in characterizing and describing needs and resources, in evaluating the relative efficiency of different programs for resource allocation, and in establishing the feasibility and likely outcomes of innovative programs. To do all this, we need research designs that incorporate adequate control over relevant variables, that can be reasonably generalized to situations of direct concern, that are sufficiently comprehensive in scope to encompass a fair range of alternatives, and that are multivariate in character.

Unfortunately, a great deal of the available research is inadequate by one or more of these criteria. Much of it follows the pattern of Approach A versus Approach B, measured by change from pre- to post-test on a single criterion variable. Acutal control is usually poor; and it is difficult to determine what the actual "treatments" were. Generalizations are drawn from populations of unknown or inappropriate character; the reaction of orphaned infants to institutional treatment is of questionable relevance in deciding whether four-year olds should be enrolled in public schools, for instance, though such comparisons have been suggested.

These are not new complaints; in part, they represent shortcomings on the part of researchers, and in part they result from unreasonable policies of public funding agencies. Research and evalua-

tion efforts generally receive low priority, little authority and great expectations.

Nevertheless, there are reasons for optimism. First, researchers, evaluators and funding agencies are increasingly cognizant of the shortcomings of many past efforts, and aware of the critical elements in some successes. Second, the techniques needed for more adequate planning, design and analysis of educational research are becoming increasingly available to the profession as a whole. Thirdly, we can find several instances in which research has led to reasonably clearcut information of use to policy makers and program administrators.

Three case studies pertinent to early education illustrate the points made above: (a) What is the appropriate age for a child to enter school? (b) What is the effect of early intervention for disadvantaged children? (c) Does it matter what instructional program you chose (for reading, preschool education, etc.).

These case studies will be used to point up the practical consequences of inadequate research methods, to demonstrate the role of analytic planning in clarifying the question, and to suggest that a few questions can be reasonably well answered at the present time from past research.

THE "WHOLE CHILD": A TASK FORCE FANTASY?

Frank T. Sata

(Frank T. Sata, Bachelor of Architecture, University of Southern California; member Early Childhood Education Task Force; testified before General Subcommittee on Education; Staff Architect Early Childhood Education Study of Educational Development Center of Newton, Massachusetts; Teacher at Pacific Oaks College; Resource Consultant in Head Start and related community action programs throughout the country. Private architectural practice.

Wot-ta weekend! Little did I realize when I agreed to Mabel Purl to appear as a panel participant that I would re-experience cram-pains, finger cramps, and "gotta finish that paper" blues. Architects have had notorious reputation for being poor spellers and grotesque interpreters of the English language. These are by my own admission the only virtues endowed upon me by training and there ends the similarity between what I am and the professional license I hold.

On Saturday morning, September 22, 1973, 2:00 a.m., I decided to construct the puzzle from my many notes of these past months. The boys and I had watched a part of TORA, TORA, TORA this evening and I was wondering what passed their minds as they watched the bombing of Pearl Harbor. It appeared that in a very short time, one generation to be exact, a moment in history that had direct influence on their parents might be nothing more than novel entertainment. There was concern, however, of the repeated interruption by the commercials. And so with the Coca Cola song in the background, I continued to construct the puzzle.

September 5, 1973, 5:00 p.m. I ventured to my studio, hoping to be inspired by the quiet of my studio to complete this "brief." An associate had the radio playing and to my dismay, I listened to the Coca Cola song in total. This is not an attempt to equate Coca Cola and education but it's a helluva testimony of the medias that supposedly embelishes the human environment today. The merits of Coca Cola might be far better appreciated than the merits of education. A bit presumptuous on our part to believe we have the answers necessary to program the child to cope with all of tomorrow's problems. To pass on data from generation to generation has always been an aspiration worthy of great accolade by the intellectual mind, past and present. What is data and therefore relative to its own time-motion period versus what is knowledge and worth passing to the next generation are notions requiring proper evaluation.

To look at the "whole child", let us discuss the "whole being". My own simplification of the whole being might look like a simple balance or teeter-totter. You can place the brain on one side, the body on the other side and it is in perfect balance. Remove a sensory component from the brain and the body compensates. Remove a portion of the body and the brain compensates. In other words, the wholeness I refer to is the strength to compensate and balance. It is this strength that provides the power to learn and grow, seek and discover. So within the concept of balance we have absolute and abstract, known and unknown. Within the whole being we must allow for the existence of abstract components or we are truly "robots" with varying faces. An example of an abstraction is time. Time has a meaning which belongs to each individual. It is the quality of life we refer to, not the quantity of years.

The educational task is to take the "whole child", provide the knowledge and allow the child to grow as a whole being. The delicate balances are under constant stress by society's prejudices and conflictions. Education as an institution must recognize its own bureaucracy, its elitism, its protective isolationism. Education through the media is captive to the greed of capitalism. Education in the home is practically non-existent. Education through the physical environment is sad to say the least. If one carefully looks around, it is apparent who receives first priority in the cities: the car! Technology is a force that must be dealt with. We have created this force and we stand in awe of it. We consume more power because we are convinced we need it. We pollute our air, pave the earth, run, run, run, run.

Frank Lloyd Wright referred to students being educated but not cultured at all. The educational process embodying cultural consciousness will sound in harmonic unison the advent of the whole man..A whole man, in balance, who can trust with meaning and love with feeling. Tomorrow without learning is another day. Tomorrow with meaning requires a child today, a "whole child". The child is real, not a fantasy, let us give the child a chance to grow.

EARLY CHILDHOOD EDUCATION

Frank E. Delavan

(Frank E. Delavan is the Manager of the Early Childhood Education Management Team for the California State Department of Education. He received his B.A. and M.A. from Sacramento State College and his Doctorate from the University of California at Berkeley.)

One of Dr. Wilson Riles' first acts upon assuming the post of State Superintendent of Public Instruction in 1971 was to appoint a special Task Force on Early Childhood Education. This 24-member task force was to make sweeping recommendations for revitalizing public educational programs provided during the initial years of a child's school experience. Such a revitalization was desired (a) to promote the development of the basic skills essential to further success in school and life, and (b) to begin the process of restructuring all of public education, K-12.

The Report of the Task Force on Early Childhood Education envisioned programs encompassing one year prior to kindergarten through the third grade level, or its equivalent. Its recommendations were incorporated into a proposal adopted by the State Board of Education and then drafted into a bill (S.B. 1302) for consideration by the 1972 Legislature.

Late in the legislative process, however, the original bill was amended so as to defer the pre-kindergarten year feature of the proposal for reconsideration by the Legislature in 1975. Another modification of the bill related the ECE program fiscally with the Miller-Unruh Reading Program. The amended bill was passed by the Legislature, signed by the Governor on November 27, 1972, and became effective on March 6, 1973. The bill appropriated $25 million for ECE programs during 1973-74, $40 million for ECE programs during 1974-75, and $250,000 for State Department of Education support operations during the balance of 1972-73 and all of 1973-74. In order to provide assistance to ECE schools in planning their programs and to provide for a system and criteria for the review and approval of the school-level plans, an Early Childhood Education Management Team was created in March-April.

Although incorporated into the new statewide consolidated application procedures regarding most federal and state categorical allocations to school districts, S.B. 1302 also requires that a comprehensive school-level plan be submitted for approval by each participating school. These school-level plans for ECE programs are to be concerned with individualized instructional programs using diagnostic-prescriptive approaches which are based on identified needs. The bill requires that parents participate in the planning, implementation, and evaluation of the programs. The programs are to reduce the adult-pupil ratios to 1:10 in the participating schools and to provide staff development and parent education activities necessary to help teachers and parents fulfill their roles in the program. These programs also are to stress, as needed, diagnostic, referral, and follow-up efforts in the area of health.

By September 13, 1973, the Early Childhood Education Management Team had received 1,019 school-level plans for ECE programs. Eight additional schools were eligible to submit such plans, but elected not to do so. Two schools submitted plans which did not meet the requirements of the program and decided not to continue developing their plans accordingly. 397 school plans were reviewed and approved as submitted. The remaining 620 school plans were reviewed and requests were made for addenda or revisions. All but 30 of these school plans had been revised accordingly and approved for a total of 987 approved ECE programs on that date. Since September 13, most of the pending school plans have been resolved so that approximately 1,000 schools will be initiating ECE programs for 1973-74.

Admittedly, there are some schools entering this program which are experiencing anxieties and problems. However, in general, the ECE programs in the participating schools are generating considerable enthusiasm on the part of parents and teachers, and S.B. 1302 is proving to be the most exciting thing to happen to kindergarten-primary education in California in over a generation.

SYMPOSIUM IX

STAFF DEVELOPMENT PROGRAMS THAT MAKE A DIFFERENCE

Chairman: Robert Hocker
Director of Pupil Personnel
Alvord Unified School District

Participants: Thomas Gordon, President
Effectiveness Training Associates
Pasadena

James L. Olivero
Executive Director
Nueva Day School and Learning Center
Hillsborough

SYMPOSIUM X

PITFALLS AND PRATFALLS IN STULL ACT IMPLEMENTATION

Chairman: Dr. Richard J. Shavelson
Acting Assistant Professor
of Education
School of Education
Stanford University

Participants: David C. Berliner
Director of Evaluation
Far West Laboratory

Emmett R. Berry, Jr., Superintendent
Riverside Unified School District

THE STULL ACT IS ONLY A TOOL

Ray Berry

(Ray Berry is Superintendent of Schools in Riverside Unified School District, Riverside, California. He has been Superintendent since 1968. Prior to that time, he worked in the district in helping initiate development of personnel and instructional functions appropriate to a decentralized, integrated school system.)

My contribution to the Stull Act panel stems from experience with evaluation programs at district level and not from formal research on the Act implementation. Much of my statement is, therefore, more a matter of personal opinion than of fact.

Nevertheless, experience can be a hard teacher, especially when dealing with the difficult business of evaluation of one human being by another.

I certainly believe that evaluation is badly needed and necessary. Moreover, I am convinced that useful evaluation between people can occur.

I do not accept that a paper product of guidelines, mandates, objectives, and procedures which are imposed upon an organization such as a school district, from either outside or inside, will do the job. There is no more of a tried and true method of evaluation than there is of teaching reading--and for similar reasons. Human beings are just too complex and contrary!

If months and even years of preparatory foundation work does not occur, then any system of evaluation policies and regulations is not likely to really succeed. In fact, such a system may prove counter-productive.

By foundation work, I mean that the most of the following components must be an integral part of the organization--in this case, the school district:

1. The organization itself cannot be purely hierarchical in structure. Power, authority, and responsibility which are focused entirely at the top and imposed downward provoke reaction which suppresses, or even defeats, true professional evaluation.

2. Everyone must have a very clear understanding of his role and should have had a hand in arriving at that role description with his or her immediate supervisor.

3. The purpose of evaluation is to improve service. Most of the time it can and should be a positive rewarding experience for everyone concerned.

4. An alternate to dismissal for less than adequate performance is desirable. One such possibility is retention or even regression on salary schedule steps.

5. Measures of performance are only ONE part of an evaluation process. The individuals who are being measured should have been significantly involved in making decisions about the expected performances and their measures.

6. Sometimes evaluation needs to occur other than by schedule. Education is a people process. People do not fall into neat niches. Things happen to people. Usually, certain signals occur which indicate deviations or stress. Procedures need to be available for responding to such signals promptly, effectively, and constructively.

7. We have done a fine job of protecting rights and privileges of employees and other adults. We haven't done too well for the kids. By "we," I mean the courts, the laws, the school district authorities, and the employee organizations. Occasionally, we are going to have to agree that an employee is wrong and doesn't belong near children. Of course, this is what the argument is all about, but I contend that we haven't really matured yet to acceptance of such responsibility jointly.

8. Middle management personnel are keys to successful evaluation. If their skills and attitudes are inappropriate to the process, evaluation cannot succeed. Therefore, training and evaluation of these key people must be first and foremost!

9. Reasonable decentralization of the organization hierarchy with concomitant allocation of responsibility and some self-determination helps set the atmosphere for professional, objective evaluation procedures. Such organizational efforts require long, determined involvement and commitment on the part of everyone. The task is administratively more difficult, but performance potential seems to be extended significantly.

The Stull Act is a necessary authoritative commitment to the process of evaluation. However, it is only a door-opener. The real responsibility for making a people-process work effective between people belongs at the people level. These are the school board, the superintendent, and especially the in-school staffs and the students and citizens.

The words of the law or policies or behavioral objectives and the like are merely tools. Development and use of such tools, without sensitivity or mutual respect and appreciation or honest commitment, are a cop-out. Such failure is considerably beneath the level of professional dignity that citizens should expect from those who work with children.

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